EXAIR®
Manufacturing Intelligent Compressed Air Products Since 1983
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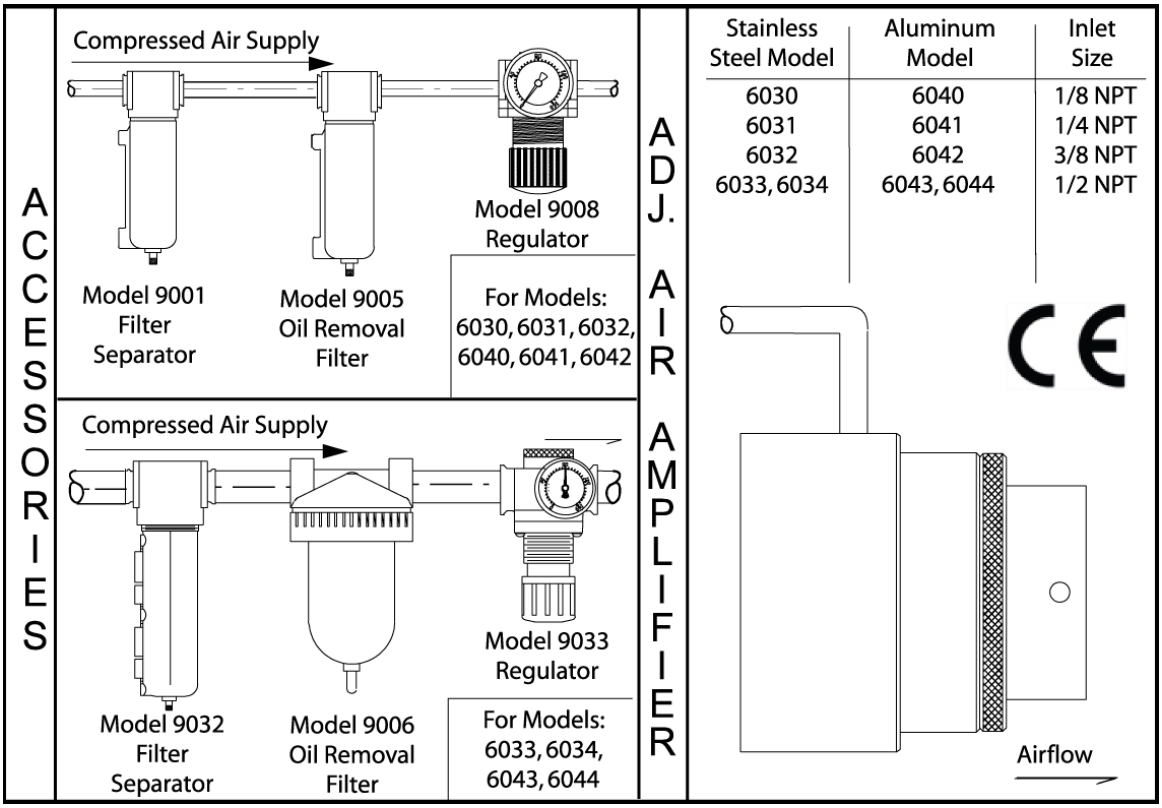
ADJUSTABLE AIR AMPLIFIER INSTALLATION & MAINTENANCE



COMPRESSED AIR LINE SIZES

For Model 6030, 6031, 6032 Stainless Steel Adjustable Air Amplifiers and Model 6040, 6041 and 6042 Aluminum Adjustable Air Amplifiers, use 1/4" pipe or 3/8" hose for runs up to 25' (7.6m) long. For runs up to 50' (15.2m), use 3/8" pipe or 1/2" hose and for runs over 50' (15.2m), use 1/2" pipe or larger. For Model 6033 and 6034 Stainless Steel Adjustable Air Amplifiers and Model 6043 and 6044 Aluminum Adjustable Air Amplifiers, use 1/2" pipe or larger. Do not use restrictive fittings or undersized lines that can "starve" the Adjustable Air Amplifier by causing excessive line pressure drop.

COMPRESSED AIR SUPPLY

With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Adjustable Air Amplifier will operate for years with no maintenance required.

Use a 5 micron or smaller filter separator on the compressed air supply (Model 9001 Automatic Drain Filter Separator for Model 6030, 6031, 6032, 6040, 6041, 6042; Model 9032 Automatic Drain Filter Separator for Model 6033, 6034, 6043 and 6044).

To prevent problems associated with oil, use an oil removal filter (Model 9005 Oil Removal Filter for Model 6030, 6031, 6032, 6040, 6041, 6042; Model 9006 Oil Removal Filter for Model 6033, 6034, 6043 and 6044). Use a 0.03 micron or smaller oil removal filter on the compressed air supply. The oil removal filter should be used downstream from the automatic drain filter separator. Filters should be used close to each Adjustable Air Amplifier, within 10 to 15' (3 to 4.6m) is best.

Adjustable Air Amplifiers are designed to use normal shop air supplies up to 100 PSIG (6.9 BAR, 689 kPa). For infinite control of flow and force, pressure may be regulated (Model 9008 Pressure Regulator for Model 6030, 6031, 6032, 6040, 6041 and 6042; Model 9033 Pressure Regulator for Model 6033, 6034, 6043 and 6044). Adjustable Air Amplifiers are designed for 250 PSIG (17.2 BAR, 1.72 MPa) Max.

If air preparation units other than EXAIR models are being used, please note the following:

- PRESSURE REGULATORS – Must be pressure relieving and rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa). Suggested operating pressure is 5-125 PSIG (0.3-8.6 BAR, 34-862 kPa). For models 2" (51mm) and under, flow should be minimum 50 SCFM (1,416 SLPM). For models over 2" (51mm), flow should be minimum 90 SCFM (2,549 SLPM).

- AUTO DRAIN FILTER SEPARATORS – Must be rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa) and have 5 micron filtration. For models 2" (51mm) and under, flow should be minimum 50 SCFM (1,416 SLPM). For models over 2" (51mm), flow should be minimum 90 SCFM (2,549 SLPM).
- OIL REMOVAL FILTERS – Must be rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa) and have 0.03 micron filtration. For models 2" (51mm) and under, flow should be minimum 37 SCFM (1,048 SLPM). For models over 2" (51mm), flow should be minimum 185 SCFM (5,239 SLPM).

USING ADJUSTABLE AIR AMPLIFIERS

In most cases, the Adjustable Air Amplifier will be supported by the compressed air supply pipe.
For blowoff, the blast of air is aimed at the target surface. For removal of dust, smoke or fumes, a hose may be attached to either or both ends of the Adjustable Air Amplifier. For conveying small parts, the Adjustable Air Amplifier should be mounted at the point of suction.

HOW ADJUSTABLE AIR AMPLIFIERS WORK

Adjustable Air Amplifiers produce a high volume, high velocity blast of air. They use compressed air as a power source and have no moving parts. The compressed air (primary air) exhausts through a ring nozzle (adjustable opening) to produce a thin ring of high velocity air. This ring of air gives up velocity to induce mass flow of surrounding air (secondary air) in large volumes. This secondary air is pulled through one end (vacuum end), mixes with the primary air, and then exhausts from the other end giving a concentrated blast.

Compared to most nozzles and open air lines, Adjustable Air Amplifiers reduce compressed air consumption and lower sound levels. They usually pay out in less than three months, including installation costs.

Note: Sharp edges might be present on any of these products. Please take appropriate precautions when handling.

ADJUSTING THE AIR AMPLIFIER

If force or vacuum is too low, the air gap can be opened. This will dramatically increase vacuum, outlet flow and force. To open the gap, loosen the lock ring and back out the inner sleeve until the desired gap opening is reached. The gap can be set with shim stock to help in obtaining a more accurate setting. After setting the gap opening, tighten the lock ring to hold it in place, then remove the shim stock from the gap (if shim stock is used).

TROUBLESHOOTING & MAINTENANCE

If There Is A Reduction In Flow Or Force From The Adjustable Air Amplifier, check the pressure by installing a gauge at the compressed air inlet of the Adjustable Air Amplifier. Large pressure drops are possible due to undersized lines, restrictive fittings and clogged filter elements.

For replacement or repair filter and regulator parts, contact EXAIR at 1-800-903-9247 or techelp@exair.com. Call (513) 671-3322 for outside the US and Canada.

CLEANING

If contaminants have clogged the Adjustable Air Amplifier, inspect the unit by disassembling. Adjustable Air Amplifiers consist of an outer and inner sleeve. The two sleeves are threaded together to form the gap through which the compressed air ejects. The adjustable gap is locked in place with a knurled ring. In most cases, a .002" to .004" (.05 to .10mm) gap should be used. Inspect each part for dirt contamination and a possible oil film in the area of the slotted nozzle. Clean each part. Prior to reassembly it is recommended to apply an anti-seize compound to the threads (silicone based products should not be used in a paint environment). This will permit ease of future adjustment and disassembly. Reassemble with the shim (if used) installed in the correct position.

Occasionally, there is a buildup which occurs in the throat of the Adjustable Air Amplifier as a result of vapors in the atmosphere. Clean the surface with a solvent and a clean rag. To prevent contaminants from getting pushed back into the slot, perform this procedure with a small amount of compressed air passing through the Adjustable Air Amplifier.

If you have any questions or problems, please contact:

YOUR INFO HERE:

Company Name	Telephone	
FAX:	Email:	Website: